

**Abstract**

The invention provides a wafer pad assembly for use in an ion implanter for mounting and cooling a wafer. The wafer pad assembly comprises a wafer support pad having an upper surface for mounting the wafer and a lower surface. The lower surface of the wafer support pad is connected to a coolant passage having an inlet section and an outlet section arranged in an opposed configuration, wherein said inlet section is counterbalanced by said outlet section. The lower surface is connected to a frame having an outer curved surface in mating engagement with a complementary shaped bearing surface of a housing wherein said wafer can be tilted or rotated about an axis.